

# West Lafayette City Engineer's Office

## Right of Way Excavation Program

# Right of Way Excavation Program

## Preface to Permit Program

Phone: (765) 775-5130  
FAX: (765) 775-5249  
e-mail: rob@mail.city.west-lafayette.in.us

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### EXECUTIVE SUMMARY

"The conditions of our city and county streets are of increasing interest to the motoring public. The public is paying more fuel tax, but receiving less in terms of smooth-riding quality roads. In fact, the rough-riding surface causes the motoring and bicycling public to spend thousands of dollars each year for front end alignments and other repair work on their automobiles, trucks and bikes. The public is turning to local city and county governments[...] for answers about the poor road conditions."

- Pavement Cuts for Utilities: A Guide for their Management. J.M. Iddins and C.F. Scholer. October 1984 HERPICC Publication No. H-84-6, West Lafayette, IN. 47907.

The City of West Lafayette must maintain our roads and streets with low budgets and few personnel. An issue that is of increasing concern to the public and thereby the City of West Lafayette and Neighboring governmental units is the management of excavations in the right of way. In response, the City has developed a program to manage the Excavation in the City's Right of Way. The development and implementation of this program has been ongoing for many years. Having said this, it should also be noted that the utility companies have recognized this fact and have greatly improved their quality of work when performing excavations. This was stated in a recent Board of Works meeting in West Lafayette.

In an ongoing effort to provide a smoother management of excavation and provide quality service, in general, the City Engineer's office has begun a process of formalizing the management of Excavations within it's right-of-way. This office has developed repair standards for excavation in the roadway pavement. This office has proposed standards to the Board of Works for The method for replacing multiple cuts into improved streets (which have been approved). This office has written it's rules and regulation that all applicants must comply with when applying for an excavation permit in the right of way. Our office has updated and improved the Excavation Permit. In addition, we have developed specifications for the replacement of Public Curb and Sidewalk.

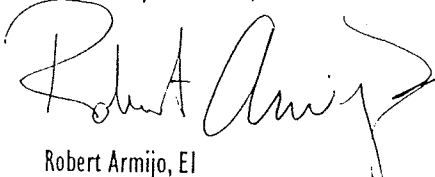
The leading customer for the Excavation Permit Program tends to be the Public Utilities that serve the City of West Lafayette. To better handle that work load we have designed our program to best meet that demand. Individual homeowners and contractors applying for an excavation permit should not find the process daunting, though. Through this booklet and by generalizing our rules and regulations, the services that the City Engineer's office provides should be much more "user friendly." To further help any person or any organization, we are willing and available to discuss any concern in this program, especially in unique and difficult situations.

#### PROGRAM PROCESS -- GENERAL

- 1) **Applicant Contacts City Engineer's office** and brings appropriate drawings and documentation for our review.
- 2) **Applicant Completes Excavation Permit Application** and ensures form is complete and correct.
- 3) **Applicant Ensures Bond is on file** with our office. The applicant can either be bonded or ensure that the contractor is bonded. Bond is a standing performance bond (good for one year) in the amount of \$5,000.
- 4) **Applicant must wait until utility locates are completed.** Locates will be completed within two (2) working days.
- 5) **Excavation Performed.** In the event that any utilities are damaged, it must be reported immediately and before excavation is back-filled. Please see administrative rules for additional responsibilities.
- 6) **Excavation Back-filled.** Please see construction standards for back-fill requirements.
- 7) **Applicant Schedules Inspections.** The contractor can also schedule inspections, but the applicant is still responsible.
- 8) **Repairs complete and Inspections complete.** Applicant should be aware that they are responsible for work and repairs improperly executed. Applicant is also responsible for street excavations until the street is repaved. See administrative rules for more details.
- 9) **City informs applicant if repair is satisfactory.** This is usually done orally, but can also be stated by letter. The process is complete at this time. However, repairs or corrections may be required at this point or in the future (if patch does not hold).

I thank you for your time and patience in reviewing this material. Your time to review this information will be well spent in terms of reducing the frustration, time, and expense involved with improper excavations. If you should have any questions or comments on this program or any other service that this office provides, I encourage you to call me. I can be reached by phone (765-775-5130) or by appointment. Our office is open weekdays from 8:00 am to 4:30 pm.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robert Armijo", with a stylized flourish at the end.

Robert Armijo, EI  
Assistant City Engineer

revision 6/11/98

Phone: 775-5130

Fax: 775-5249

## **Excavations in the City Right of Way Administrative Rules**

- 1. In accordance with Sec. 114.03 of the West Lafayette City Code the City Engineer is hereby establishing the rules and regulations that all applicants shall abide by when applying for and making excavations in the City Right of Way.**
2. Any excavation permit is subject to denial or may be subject to approval with revisions. Additionally, the review of an application for permit may be delayed if the required information is not presented. For more information on the license and permitting of excavations see West Lafayette City Code Chapter 114 and IC 36-9-6-14.
3. Any organization or individual contemplating an excavation in the city right of way, must first apply for an excavation permit through the City Engineer's Office before any work is attempted. The only exception is a bonifide emergency, in which case, the excavation is automatically granted. For further information about the responsibility in an emergency look to IC 8-1-26-19.
4. When submitting an Emergency Excavation Permit, the applicant must state on the permit that the excavation was an emergency and the nature of the emergency. A permit application is required within 1 working day of the emergency excavation. For the purpose of locating City owned utilities, the applicant shall contact the Waste Water Treatment Utility and request emergency assistance (IC 8-1-26-19.2).
5. All applications for permits to make excavations and installations in the city right of way, shall be made in writing on printed forms available at the Office of the City Engineer by the applicants, and shall give the exact location, using a map or diagram, the starting point, course and termination and the purposes of the excavation contemplated. (sec. 114.02)
6. All applicants must have a current standing performance bond on file with the city. The bond required is a \$5,000 bond for a one year period.
7. The fee for each permit (each excavation made in city right of way) is 15 dollars. (sec. 114.04)
8. The applicant shall have a signed and approved copy of the permit on the premises of the work at all times when work is being done. The progress of work may be stopped on any excavation in the event that a signed and approved copy of the permit is not shown for such work. (Sec. 114.05)
9. All non-emergency excavation permits in city streets will be denied if the street has been recently repaved. To find out which streets will be repaved, the applicant should call the City Engineer's office or the Street Department.

10. For the purpose of locating City Utilities, the applicant shall provide at least two (2) full working days notice, but not more than twenty (20) calendar days notice before the commencement of work (IC 8-1-26-16).
11. Final repair work for each permit shall be started within 60 days after approval. Extensions may be granted by the City Engineer or duly appointed official. Should this time period lapse, the permit is no longer valid and the applicant must apply for a new permit at the cost of 15 dollars.
12. After the start of each excavation, work shall be completed within 10 working days. Extensions may be granted by the City Engineer or duly appointed official. Should this time period lapse, the permit is no longer valid and the applicant must apply for a new permit at the cost of 15 dollars.
13. If an excavation is made in a city street, two inspections are required. One inspection shall be made just prior to the time when concrete will be poured. The other inspection shall be made after asphalt is in place. The appropriate responsible individual (contractor or utility representative) shall be present at both inspections, unless waived by the City Engineer or duly appointed official. If the inspections are not made or the repair is not satisfactory the permit may be revoked and/or fines applied.
14. Any inspection by the city shall in no way relieve the applicant of any duty or responsibility to the general public nor shall such service and/or control by the city relieve the utility owner from any liability for loss, damage or injury to persons or adjacent properties.
15. No temporary patches or "cold patches" shall be used unless in an emergency situation or when hot mix is not available due to weather. In the event that permanent repairs cannot be made within the allotted time, the applicant shall contact the City Engineers office to arrange for a satisfactory temporary patch. Permanent repairs will be made at the earliest possible opportunity.
16. Any organization or individual who is granted an excavation permit shall guard the excavation during work. Proper warnings and/or traffic signage shall be used to designate the area of excavation (refer to the Indiana Manual on Uniform Traffic Control Devices Part VI Construction & Maintenance). If the excavation must be left unattended for any period of time, a proper metal plate shall be used to cover the excavation and proper warning devices installed. On any city street, during periods of weather when heavy snowfall is probable, traffic barriers must surround the excavation until the excavation is filled.
17. Applicants are responsible for street repairs on a street until that street is repaved. Applicants will be required to correct any street repairs that are improperly constructed (i.e. a sinking patch, "cold patch", and etc.). When notified the applicant shall make the repair within two weeks.
18. If required repairs are not made within (the above) two week period, the City may make the repairs and bill the applicant.
19. Any organization that wishes to close an entire street must first contact the City Engineer, if the City Engineer

determines that the street closure may be warranted, the applicant shall petition the Board of Works and Safety for the street closure. If the closure is granted by the Board of Works and Safety, it may be required that the closure be advertised by newspaper. In addition, it may be required that affected residents and merchants be informed by leaving notice at their residence or place of business.

20. Closing any portion of a street in an "emergency" situation requires your immediate notification of the West Lafayette Police Dept. at 775-5200 and the West Lafayette Fire Dept. at 775-5175.

21. It is the responsibility of the applicant to schedule the inspections, to know the proper codes and procedures and to insure repairs are properly made. The applicant is further responsible for supplying the contractor with a copy of the signed permit, a copy of these rules, a copy of the construction repair standards, and all other applicable documents.

22. All OSHA standards apply to trenches and excavations.

Presented by C. Scott Snyder, City Engineer

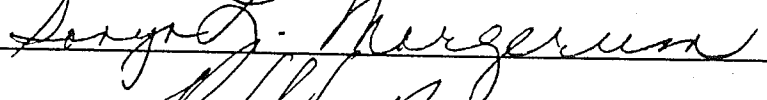
Prepared by: Robert Armijo, Assistant City Engineer

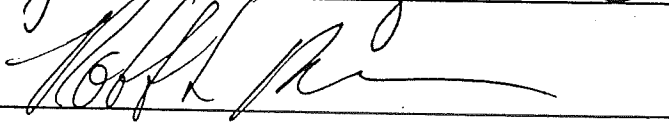
- Adopted by the West Lafayette Board of Public Works and Safety Feb. 11, 1997
- Presented to the Tippecanoe County Utility Coordinating Committee Mar. 11, 1997

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Revisions to the City of West Lafayette Rules and Regulations for  
Excavation in the City Right of Way


Approved by the Board of Public Works and Safety  
Date June 23, 1998

Mayor 

City Attorney 

Director, Dept. Development 

Attest:

  
Judith C. Rhodes  
Clerk-Treasurer

## Regulations on Public Curb & Sidewalk Replacement

### Section I: General

**1) In accordance with Sec. II4.03 of the West Lafayette City Code the City Engineer is hereby establishing the regulations that all applicants shall abide by when replacing Public curb, Sidewalks, and other publicly owned infrastructure in the City Right of Way.** Note: these regulations supplement the 6/11/98 revision to Excavations in the City Right of Way Administrative Rules.

2) All existing curb, gutter and sidewalk to be replaced shall be saw cut before removal.

3) The installation area shall be free of all vegetation.

4) If fill material is required, it shall be placed in layers not exceeding 4 inches and shall be compacted by mechanical means.

5) Concrete forms shall be wood or metal that are clean and oiled. All forms shall be properly staked and braced.

? 6) Subgrade and forms shall be wet down before concrete is poured.

7) Concrete shall not be poured on frozen earth or when temperature is or expected to drop below 35 degrees in a 24 hour period.

8) Concrete shall be air-entrained six bag mix with limestone aggregate.

9) High-early strength pavement shall be used for concrete sections that shall carry vehicular traffic (i.e. driveway approaches) & when these sections cannot be long deprived of access. High early strength Pavement shall conform to INDOT specifications (501.03(c)).

10 All concrete shall be cured for 48 hours with all pedestrian traffic prevented during this time. All vehicular traffic shall be prevented for ten (10) days or two (2) days for high early strength pavement.

11) All excavated areas are to be backfilled and compacted. Areas to be seeded with grass and covered with straw or burlap. All construction materials and debris to be removed from the site.

12) All traffic control and pedestrian safety barriers are the responsibility of the contractor.

13) Any concrete, asphalt, and/or excavation work in City Right of Way requires an excavation permit from the City Engineer's Office.

14) Please contact the City Engineer's Office at 775-5130 for the following required inspections:

A) Subgrade evaluation: After removal of existing sidewalk or after excavation on a new installation.

B) Pre-pour: After installation of all forms and reinforcement wire.

C) Final: After removal of all forms and area has been backfilled, compacted and seeded.

## **Section II: Sidewalks**

15) Sidewalks shall be not less than 4 inches thick and reinforced with 6 x 6 Number 10 gauge wire mesh. Sidewalks crossing alleyways, drive aprons, or any other area subject to vehicular traffic shall be reinforced the same and shall be not less than 6 inches thick.

16) Cross slopes of sidewalks shall not exceed 1:50.

17) The maximum allowable slope of any section of sidewalk shall not exceed 1:20. Slopes greater than 1:20 must be constructed as ramps (Consult with the City Engineer's Office).

18) Expansion joints shall be placed every 60 feet of sidewalk or wherever a cold joint is formed. Expansion material shall extend the full depth of the pour.

19) All outside edges of concrete and all joints shall be properly tooled and vibrated to prevent honeycomb cavities on the sides.

20) Curb ramps must comply with additional specifications for curb ramps. \* (Reference curb ramp standards found in current findings by the Department of Justice concerning Americans with Disabilities Act).

## **Section III: Curbing**

21) Curbs shall be a minimum of six (6) inches in width and twelve (12) inches in depth. Replacement curb to match existing or have transition section between the new and existing. Transition section shall not be less than 5 foot long. Expansion joints must be installed at the cold joints. Curbs to be installed according to INDOT standards.

22) After a minimum of 72 hours curing time for the curb, the remaining gutter area shall be filled with not less than six (6) inches of concrete from the face of the curb to the edge of the existing street pavement.

23) The gutter shall have not less than two and one-half (2 1/2) inches of asphalt surface coat to match existing street pavement.

24) The existing flow line of the gutter shall be maintained. The bottom of curb ramps to be flush with existing flow line.

#### **Section IV: Driveway Aprons**

25) Driveway aprons shall not exceed 24 ft. of width in the City Right of Way

26) Sidewalks that continue through a driveway apron shall be constructed separately from the Apron. These sidewalks must meet the above sidewalk specifications, with the modified depth noted in regulation number 27.

27) Driveway Aprons (and a sidewalk that may cross the apron) shall be not less than six (6) inches thick & sidewalk that may cross the apron shall be reinforced with 6 x 6 number 10 gauge wire mesh.

*\* All work to meet all local and state codes and standards.*

*Ref. INDOT standards, Indiana Accessibility Code (Chapter 11 of the 1998 Indiana Building Code) and ADAAG.*

Presented by: C. Scott Snyder, PE, City Engineer

Prepared by: Robert Armijo, EI, Assistant City Engineer

✓ Regulations on Public Curb and Sidewalk Replacement approved by the Board of Public Works and Safety January 26, 1999. Minutes available at the Clerk-Treasurer's Office (West Lafayette City Hall).

Office of City Engineer

City of West Lafayette  
609 West Navajo Street  
West Lafayette, Indiana 47906

Phone: 775-5130

Fax: 775-5249

# interoffice

## MEMORANDUM

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**to:** Utility Companies and Excavation Permit Applicants  
**cc:** C. Scott Snyder, City Engineer  
**from:** Robert D. Armijo, E. I. *RA*  
**re:** Addition to Regulations on Public Curb & Sidewalk Replacement  
**date:** July 27, 1999

After review of this Office's Regulations on Public Curb & Sidewalk Replacement, it was noticed that an additional regulation would clarify our requirements. Section 113.07 Placing Concrete, of the West Lafayette City Code, is a requirement that should also appear in the aforementioned regulations as #18a of Section II. It will read as follows:

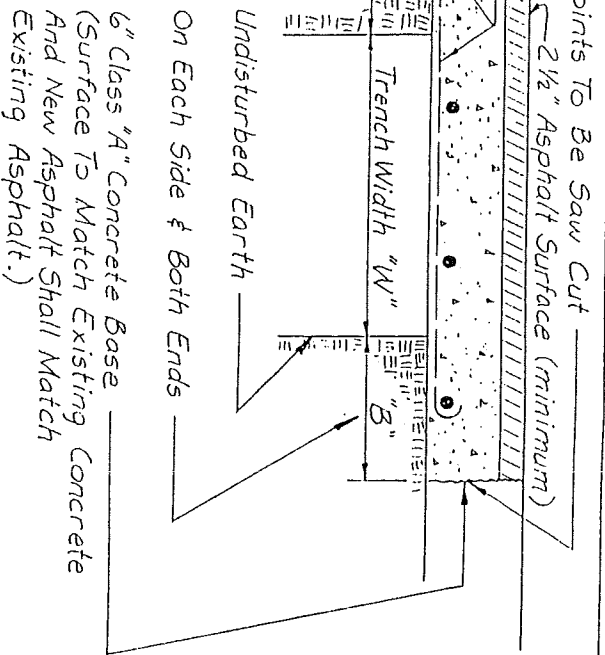
18a) Transverse joints shall be tooled with a jointer having a radius of one-fourth inch, at intervals not greater than the width of the sidewalk being constructed, unless otherwise directed by the City Engineer's Office.

from the desk of...

Robert D. Armijo, E. I.  
Assistant City Engineer  
Office of the City Engineer  
609 West Navajo Dr.  
West Lafayette, IN. 47906

317-775-5130

Fax: 317-775-5249



TYPICAL PATCH X-SECTION DETAIL

CITY OF WEST LAFAYETTE  
 METHOD FOR REPLACING CUTS  
 INTO IMPROVED STREETS  
 Approved By The Board Of Public  
 Works And Safety  
 Date 7-14-89  
 Mayor *[Signature]*  
 City Atty. *[Signature]*  
 Clerk-Tres. *[Signature]*  
 Phone: (317) 463-9544 Engineering

Back Filling Shall Be Done With Granular Material And Deposited With Special Reference To The Future Stability Of The Street. The Materials Shall Be Mechanically Compacted To The Sub-Grade Of The Street Base. All Surplus Excavation Shall Be Hauled Away.

Joints Are To Be Saw Cut.

Detail Shown Is For All Types Of Improved Streets Other Than Concrete Surface. For Concrete Surface, Concrete Shall Be Class "C", 8" Thickness, Same Reinforcement. Unimproved Streets Shall Be Restored To Their Original Condition Or Better.

Asphalt Street - Shall Be Patched With 6" Of Class "A" Concrete And 2 1/2" Of Asphalt. (Asphalt Shall Be #12 Surface)

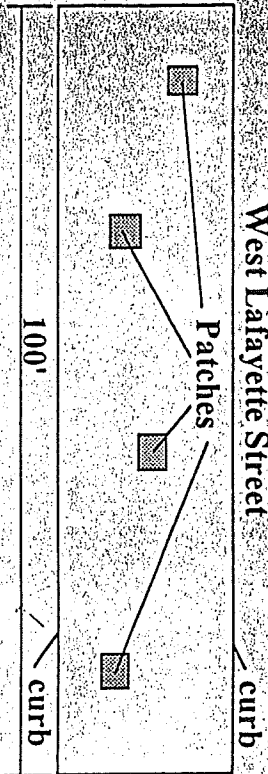
Concrete Street Overlayed With Asphalt - Shall Be Patched By Matching The Existing Concrete Thickness With 6" Of Class "A" Concrete And Matching The Existing Asphalt Thickness With New Asphalt (Asphalt Shall Be #12 Surface)

Concrete Street - Shall Be Patched With 8" Of Class "C" Concrete. All Materials To Conform To Latest Edition Of I.D.O.H. Standard Specifications.

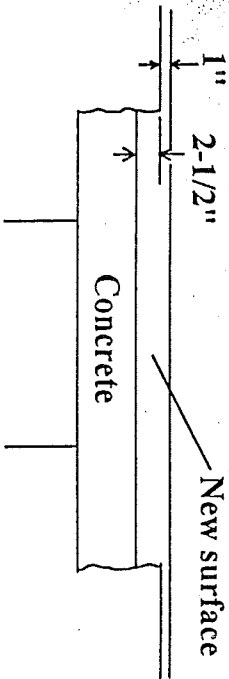
NOTE:  
 City To Be Notified  
 When Construction Begins.  
 INSPECTIONS REQUIRED  
 1. During Trench Backfill,  
 Prior To Placing Concrete.  
 2. When Complete.

"B"	W = Trench Width	S = Reinforcing Steel
6"	3'-0" or less	None
9"	3'-1" to 4'-0"	5/8" φ at 8" c. to c. 3 1/2" Long'tl.
9"	4'-1" to 5'-0"	5/8" φ at 6" c. to c. 4 1/2" "
12"	5'-1" to 6'-0"	5/8" φ at 5" c. to c. 4 1/2" "
12"	6'-1" to 7'-0"	3/4" φ at 6" c. to c. 4 1/2" "
12"	7'-1" to 8'-0"	3/4" φ at 5" c. to c. 5 1/2" "

# CITY OF WEST LAFAYETTE METHOD FOR REPLACING MULTIPLE CUTS INTO IMPROVED STREETS



- Multiple cuts shall be defined as any city street or alley, asphalt or concrete, that have the following conditions:
1. Four (4) or more patches per any 100 lineal feet of roadway by an individual utility per project, and
  2. Area cut is greater than 64 S.F. in any 100 lineal feet of roadway by an individual utility per project.



The patches below grade shall be repaired as stated in the city standards "Method For Replacing Cuts Into Improved Streets" (dated 7/14/89), leaving a 2-1/2 inch deep void in the patch area. The entire street surface for the length of the patching area from curb to curb shall have one inch (3-1/2 inches over the patches) of #12 surface (or City Engineer approved substitute) placed using professional means to establish a

smooth, even graded surface. The beginning and ending of the new pavement area shall have straight perpendicular edges to the curbline.

>50'	>100'	curb
New Pavement	Existing Street	New Pavement

## W. L. Street

New pavement areas shall not have gaps of less than 100 feet.  
Minimum length of new pavement areas shall be 50 feet.

The City Engineer shall have the authority to negotiate a payment from the utility company in lieu of resurfacing. The payment shall be based upon the unit price for asphalt from the city's most recent resurface contract and the area that would have been resurfaced according to this standard. The payment shall be prorated according to the City's resurfacing schedule at a rate of 10% per year. For example, if the street is scheduled to be resurfaced in one year, only 10% will be charged, in 2 years only 20%, etc. This payment option shall not apply to recently resurfaced streets.

Approved by the Board of Public Works and Safety.

Date 4/9/96

Mayor

Sonya L. Margerum

City Attorney

Robert L. Bauman

Director of Development

Jesse C. Andrew III

Attest:

Clerk-Treasurer

Judith C. Rhodes

APPLICANT: (Print with ink. Pencil is not acceptable.)

Name:

Phone:

Address:

## Excavation Information

Location/Address:

Purpose of Excavation:

Starting Date:

Approximate Duration:

Will Explosives be used

☐

(check in this box)

Note: Permit must be received in our office two (2) working days prior to starting date with the exception of emergency excavations (24 hrs. after excavation).

Excavation must be started in 60 days and completed 10 working days after start of excavation.

No.	EXCAVATION SIZE			AREA EXCAVATED							
	LENGTH	WIDTH	DEPTH	SW = sidewalk		ST = Street		P/S = Planting Strip			
1.				<input type="checkbox"/>	SW	<input type="checkbox"/>	ST	<input type="checkbox"/>	P/S	<input type="checkbox"/>	other
2.				<input type="checkbox"/>	SW	<input type="checkbox"/>	ST	<input type="checkbox"/>	P/S	<input type="checkbox"/>	other
3.				<input type="checkbox"/>	SW	<input type="checkbox"/>	ST	<input type="checkbox"/>	P/S	<input type="checkbox"/>	other

NOTE: IF THERE ARE ADDITIONAL HOLES, PLEASE USE THE BACK OF FORM.

NOTE: Applicant must schedule Inspections. Two are required: 1) Pre-Concrete & 2) Post asphalt. One half working day notice to the City Engineer's Office is required prior to inspection. Phone 775-5130.

I, the undersigned do hereby agree to make this excavation under the supervision and inspection of the City Engineer, and in accordance with the West Lafayette City Code; Chapter 23; Article III, "Excavations."

Applicant Representative

(Signature)

Applicant Representative

(Typed or Printed)

Date

## FOR OFFICE USE ONLY

Date Received:

Permit no.:

Fee: \$

Bill to Applicant

Pay at Issue

Bond on File

Bond Submitted with app.

Plan Attached

Permit Approved by:

Date:

Permit Issued by:

City Engineer

Date:

City Clerk

WORK DONE

Date:

Time:

am/pm

Locator's Name:

Remarks:

- ☐ Continental Casualty Company  
☐ National Fire Ins. Co. of Hartford  
☐ American Casualty Company of Reading, Pa.



For All the Commitments You Make

CNA Plaza  
 Chicago, Illinois 60685

A Stock Company

Bond # 123996364

KNOW ALL MEN BY THESE PRESENTS, That we United Water West Lafayette Inc.

200 Old Hook Road Harrington Park, NJ 07640

hereinafter referred to as the Principal, and Continental Casualty Company

a corporation organized and existing under the laws of the State of Connecticut

and authorized to do business in the State of Indiana

City of West Lafayette

and firmly bound unto 609 West Navajo West Lafayette Indiana 47906 Att: Engineering Dept.

herein after referred to as Obligee, in the sum of Five Thousand Dollars and 00/100-----(\$5,000.00\*\*)  
 lawful money of the United States of America, to the payment of which sum, well and truly to be made,  
 we bind ourselves, our executors, administrators, successors, and assigns, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That whereas, the Principal has made application for  
 a license or permit to the Obligee for the purpose of, or to exercise the vocation of \_\_\_\_\_  
"City right-of-way excavations per code"

NOW, THEREFORE, if the Principal shall faithfully comply with all ordinances, rules and regulations  
 which have been or may hereafter be in force concerning said License or Permit, and shall save and keep  
 harmless the Obligee from all loss or damage which it may sustain or for which it may become liable on  
 account of the issuance of said license or permit to the Principal, then this obligation shall be void;  
 otherwise, to remain in full force and effect.

THIS BOND WILL EXPIRE July 16, 1997

but may be continued by continuation certificate signed by Principal and Surety. The surety may at any  
 time terminate its liability by giving thirty (30) days written notice to the Obligee, and the surety shall  
 not be liable for any default after such thirty day notice period, except for defaults occurring prior thereto.

SIGNED, SEALED AND DATED this 19th day of July, 1996

United Water West Lafayette Inc.

Principal

By: [Signature]

Continental Casualty Company

Surety

By: [Signature]  
Jennifer L. Kurtz Attorney-in-fact

Engineering Office  
 West Lafayette